ABSTRACT

In figure recognition using a color image, there is provided a figure reading apparatus capable of increasing the processing rate while maintaining the recognition precision.

5   The figure reading apparatus includes an image input apparatus (10) for inputting a color image and a data processing apparatus (20) for conducting processing on the input color image.   The figure reading apparatus has a main color extraction function (S1) of extracting main colors contained in the color image and resolving the color image into main

10   color images respectively of the main colors extracted from the input color image, a projection function (S3) of projecting points of extracted main colors on a three-dimensional space onto a plane by using a conversion expression, a candidate narrowing down function (S4) of removing combinations that need not be combined according to features of distance

15   between main colors projected onto a two-dimensional space, and a combination generation function (S5) of combining images from candidates narrowed down and generating an image area candidate.

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